

WHAT IS CLAIMED IS:

1. A system for communicating data between electronic devices, the system comprising:
at least one transmitter in electrical communication with a sending electronic device, the transmitter having a transmitter data sum accumulator and a transmitter identification generator for creating an identification of a desired receiver from a sum of the incoming data; and
at least one receiver in communication with a receiving electronic device, the receiver having a receiver data sum accumulator and a receiver identification generator to decode the identification of the receiver from the sum of the incoming data such that if the identification matches the identification of the receiver the data is transmitted to the receiving electronic device.
2. The system of claim 1 wherein the transmitter further includes an analog to digital converter to convert analog signals from the sending electronic device into digital data and the receiver further includes a digital to analog converter for converting the data into an analog signal.
3. The system of claim 1 wherein the transmitter further includes an encryption unit for encrypting the data and the receiver further includes a decryption unit for decrypting the data.
4. The system of claim 1 wherein the transmitter further includes a compression unit for compressing the data and the receiver further includes a decompression unit for decompressing the data.

5. The system of claim 1 wherein:

the transmitter further includes an analog to digital converter and an encryption unit to convert analog signals from the sending electronic device into digital data and an encryption unit for encrypting the digital data; and

the receiver further includes a decryption unit for decrypting the digital data and a digital to analog converter for converting the data into an analog signal.

6. The system of claim 5 wherein the transmitter further includes a compression unit for compressing the digital data and a the receiver further includes a decompression unit for decompressing the digital data.

7. A transmitter for transmitting electronic signals from a sending device to a receiving device, the transmitter comprising:

a data sum accumulator and an identification generator in electrical communication with the sending device, the data sum accumulator and the identification generator operative to create an identification of a desired receiver from a sum of the incoming data.

8. The transmitter of claim 7 further comprising a network protocol generator for converting the data into a network standard protocol.

9. The transmitter of claim 8 further comprising an analog to digital converter for converting the electronic signals from the sending device into digital data.

10. The transmitter of claim 9 further comprising an encryption unit for encrypting the digital data.
11. The transmitter of claim 10 further comprising a compression unit for compressing the digital data.
12. The transmitter of claim 7 further comprising an identification for the transmitter.
13. The transmitter of claim 12 wherein the identification is automatically generated.
14. The transmitter of claim 7 wherein the transmitter stops transmitting automatically when data is not present.
15. The transmitter of claim 7 wherein the transmitter automatically begins transmitting data when data is present.
16. A receiver for a receiving electronic device, the receiver having an identification and configured for reception of electronic signals from a transmitter of a sending device, the receiver comprising:

a data sum accumulator and an identification generator to decode the identification of the receiver from the sum of the incoming data such that if the identification matches the identification of the receiver the data is transmitted to the receiving electronic device.

17. The receiver of claim 16 further comprising a digital to analog converter configured to convert the data to an analog signal.
18. The receiver of claim 17 further comprising a decryption unit for decrypting the data.
19. The receiver of claim 18 further comprising a decompression unit for decompressing the data.
20. The receiver of claim 16 wherein the identification is automatically generated by the receiver.
21. The receiver of claim 16 wherein the receiver turns off when data is not present.
22. The receiver of claim 16 wherein the receiver turns on when data is present.
23. An adaptor for connecting an electronic device to a computer network, the adaptor comprising:
 - a first data buffer in electrical communication with the electronic device;
 - a first data sum accumulator in electrical communication with the electronic device; and
 - a first identification generator in electrical communication with the data sum accumulator and the computer network;wherein the first data buffer, the first data sum accumulator and the first identification generator generate a receiver identification from the sum of incoming data; and
 - a second data buffer in electrical communication with the computer network;

a second data sum accumulator in electrical communication with the computer network;
and

a second identification generator in electrical communication with the data sum accumulator and the electronic device;

wherein the second data buffer, the second data sum accumulator and the second identification generator generate a receiver identification from the sum of the incoming data.

24. The adaptor of claim 23 further comprising a network protocol generator in electrical communication with the electronic device and the first data buffer, the first data sum accumulator and the second identification generator, the network protocol generator being operative to convert the data signals into a prescribed network standard.

25. The adaptor of claim 24 further comprising a computer network MAC layer in electrical communication with the computer network and the first receiver identification generator, the second data buffer and the second data sum accumulator, the computer network MAC layer configured to control the access of the data to the computer network.

26. A method for communicating data between electronic devices, the method comprising the following steps:

at a transmitter of a sending device:

summing the data from the sending device and a receiver identification for
generating an identification of a receiving device;

at a receiver of a receiving device:

summing the data from the transmitter to determine the identification of the receiving device; and

comparing the identification of the receiving device with the identification of the receiver to determine if a match exists.

27. The method of claim 26 further comprising the step of converting the signal of the sending device into a digital data signal.

28. The method of claim 26 further comprising the step of converting the digital data signal received by the receiver into an analog signal for the receiving device.

29. The method of claim 27 further comprising the steps of compressing the data before generating the identification of the receiving device at the transmitter and decompressing the data after determining the identification at the receiver.

30. The method of claim 27 further comprising the steps of encrypting the data before generating the identification of the receiving device at the transmitter and decrypting the data after determining the identification at the receiver.

31. The method of claim 27 further comprising the steps of compressing and encrypting the data before generating the identification of the receiving device at the transmitter and decrypting and decompressing the data after determining the identification at the receiver.

32. A system for communicating data between electronic devices, the system comprising:

means for generating an identification of a receiving device at a sending device by summing the incoming data; and

means for generating the identification of the receiving device at the receiving device by summing the incoming data.

33. A router for connecting a first and second networks, the router comprising:

a first network protocol generator in electrical communication with the first network;

a first data buffer in electrical communication with the first network protocol generator;

a first data sum accumulator in electrical communication with the first network protocol generator;

a first identification generator in electrical communication with the data sum accumulator; and

a second network protocol generator in electrical communication with the first identification generator and the second computer network;

wherein the first data buffer, the first data sum accumulator and the first identification generator generate a receiver identification from the sum of incoming data; and

a second data buffer in electrical communication with the second network protocol generator;

a second data sum accumulator in electrical communication with the second network protocol generator; and

a second identification generator in electrical communication with the data sum accumulator and the first network protocol generator;

wherein the second data buffer, the second data sum accumulator and the second identification generator generate a receiver identification from the sum of the incoming data.

34. A method for generating an address of a receiver from a stream of data and a receiver identification, the method comprising the steps of : /

summing the data stream; and

generating the address from the sum of the data and the receiver identification;

wherein the address corresponds to the identification of the receiver.